passing it to subsequent manufacturing without delay. Thermophilic growth and contamination in blanchers should be minimized by the use of adequate operating temperatures and by periodic cleaning. Where the blanched food is washed prior to filling, water used shall be safe and of adequate sanitary quality.

- (12) Batters, breading, sauces, gravies, dressings, and other similar preparations shall be treated or maintained in such a manner that they are protected against contamination. Compliance with this requirement may be accomplished by any effective means, including one or more of the following:
- (i) Using ingredients free of contamination.
- (ii) Employing adequate heat processes where applicable.
- (iii) Using adequate time and temperature controls.
- (iv) Providing adequate physical protection of components from contaminants that may drip, drain, or be drawn into them.
- (v) Cooling to an adequate temperature during manufacturing.
- (vi) Disposing of batters at appropriate intervals to protect against the growth of microorganisms.
- (13) Filling, assembling, packaging, and other operations shall be performed in such a way that the food is protected against contamination. Compliance with this requirement may be accomplished by any effective means, including:
- (i) Use of a quality control operation in which the critical control points are identified and controlled during manufacturing.
- (ii) Adequate cleaning and sanitizing of all food-contact surfaces and food containers.
- (iii) Using materials for food containers and food-packaging materials that are safe and suitable, as defined in §130.3(d) of this chapter.
- (iv) Providing physical protection from contamination, particularly airborne contamination.
- (v) Using sanitary handling procedures.
- (14) Food such as, but not limited to, dry mixes, nuts, intermediate moisture food, and dehydrated food, that relies on the control of $a_{\rm w}$ for preventing the

growth of undesirable microorganisms shall be processed to and maintained at a safe moisture level. Compliance with this requirement may be accomplished by any effective means, including employment of one or more of the following practices:

- (i) Monitoring the a_w of food.
- (ii) Controlling the soluble solidswater ratio in finished food.
- (iii) Protecting finished food from moisture pickup, by use of a moisture barrier or by other means, so that the $a_{\rm w}$ of the food does not increase to an unsafe level.
- (15) Food such as, but not limited to, acid and acidified food, that relies principally on the control of pH for preventing the growth of undesirable microorganisms shall be monitored and maintained at a pH of 4.6 or below. Compliance with this requirement may be accomplished by any effective means, including employment of one or more of the following practices:
- (i) Monitoring the pH of raw materials, food in process, and finished food.
- (ii) Controlling the amount of acid or acidified food added to low-acid food.
- (16) When ice is used in contact with food, it shall be made from water that is safe and of adequate sanitary quality, and shall be used only if it has been manufactured in accordance with current good manufacturing practice as outlined in this part.
- (17) Food-manufacturing areas and equipment used for manufacturing human food should not be used to manufacture nonhuman food-grade animal feed or inedible products, unless there is no reasonable possibility for the contamination of the human food.

[51 FR 24475, June 19, 1986, as amended at 65 FR 56479, Sept. 19, 2000]

§110.93 Warehousing and distribution.

Storage and transportation of finished food shall be under conditions that will protect food against physical, chemical, and microbial contamination as well as against deterioration of the food and the container.

Subpart F [Reserved]